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EXAMINER	
JACKSON, JAKIEDA R	

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/835,535	GHALI, MIKHAIL E.	
	Examiner	Art Unit	
	Jakieda R Jackson	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-20* is/are rejected.

7)☒ Claim(s) *7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed February 18, 2005, applicant submitted an amendment filed on May 20, 2005, in which the applicant requested reversal of the rejection with respect to **claims 1-20**.

Response to Arguments

2. Applicant argues regarding pages 7-10 and 12 of the remarks, that there has been 3 non-final actions in the history of this application and that there has been a number of references used to reject the application. It is unfortunate that the office has applied a third non-final action. However, the current rejection is the office's position and it is noted the acting supervisory patent examiner approved and signed the previous action.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

On page 11 of the remarks, applicant argues that the examiner has not pointed to any particular teaching, suggestion or motivation in the cited references that accomplishes "acoustic transcription of speech using an orthographic system comprising a compact set of phonetics". Rather, applicant claims a ***reduced*** set of phonetics, thereby providing for a compact model for acoustically transcribing said language, which the compact model is the result and is inherent when removing

something (in particular, phonological units, phonetic units or identified variations in said language).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., acoustic transcription of speech using an ***orthographic system*** comprising a ***compact*** set of phonetics) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also argues that only in the third office action has the examiner introduced the argument that Karaali would have been obvious to combine with each of the prior art references "so that the storage requirements would not exceed the feasibility of most applications". Applicant also argues that the examiner pointed to no teaching that implies that statement. That statement and the motivation to combine the references can be found in Karaali (column 1, lines 38-40).

Furthermore, applicant argues that even the combination of Karaali with any or all of the cited references does not disclose a reduced text-to-speech phonetics set that includes the claimed element where a phonological unit, a phonetic unit or an identified variation in a language is removed.

However, Karaali teaches that the text-to-speech system is reduced in size by using neural network (column 21, lines 49-60) and that the neural network is trained to associate with phonetic representation (column 21, lines 31-45). Also, figure 16 teach a

phonetic set (element 1604), wherein the alignment separator is removed, which results in a reduced string of phones (element 1606 with column 16, lines 24-40).

Therefore, applicant's arguments filed May 20, 2005 has been considered, but are not persuasive.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-4, 12-14 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bordeaux (USPN 5,757,023) in view of Shu (USPN 6,016,470), and in further of Karaali et al. (USPN 5,930,754), hereinafter referenced as Karaali.

Regarding **claim 1**, Bordeaux discloses "retrieving from storage neural network parameters, weights and dictionaries for the appropriate language" (col. 5, lines 26-30). Inherently, a neural network must know the phonological/phonetic units associated with the language and its variations, in order to properly identify phonemes and allophones (col. 5, lines 38-41).

Bordeaux does not disclose "developing a maximal set based on said defined phonological units, phonetic units, and identified variations in said language, and

reducing said maximal set to a minimal set of phonemes and allophones wherein said reducing said maximal set further comprises reducing a text-to-speech phonetics set, which further comprises removing one of said phonological units, phonetic units and identified variations is said language, thereby providing for a compact model for acoustically transcribing said language".

Shu teaches a method of building a rejection grammar, which originally starts with a full set of phonemes of a given language and then gradually shrinks the set until sufficient accuracy is achieved using the smallest number of phoneme models. (fig 5, col. 8, lines 6- 10)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by Bordeaux to follow up the process of training the neural network with a reduction process taught by Shu. This would significantly improve the efficiency of the system because duplicate and unnecessary phoneme entries would be removed from the system, thus improving the speed of operation and reducing memory requirements for the neutral network.

Bordeaux in view of Shu discloses a method for transcribing a language acoustically based on well-defined basic phonetics, however lacks reducing said maximal set to a minimal set of phonemes and allophones wherein said reducing said maximal set further comprises reducing a text-to-speech phonetics set, which further comprises removing one of said phonological units, phonetic units and identified variations is said language.

Karaali discloses a method for neural network based orthography-phonetics transformation wherein the text to speech system is reduced in size (column 21, lines 49-60) and that the neural network is trained to associate with phonetic representation (column 21, lines 31-45). Also, figure 16 teach a phonetic set (element 1604), wherein the alignment separator is removed, which results in a reduced string of phones (element 1606 with column 16, lines 24-40), in order to produce the most accurate phonetic representation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bordeaux in view of Shu's method such that it reduces said maximal set to a minimal set of phonemes and allophones wherein said reducing said maximal set further comprises reducing a text-to-speech phonetics set, which further comprises removing one of said phonological units, phonetic units and identified variations is said language, so that the storage requirements would not exceed the feasibility of most applications (column 1, lines 38-40).

Regarding **claim 2**, Bordeaux discloses "retrieving from storage neural network parameters, weights and dictionaries for the appropriate language" (col. 5, lines 26-30).

Bordeaux does not disclose "a step of extracting information that further comprises: identifying terminological problems associated with said language, identifying transcription problems associated with said language, extracting all phonological and phonetic units associated with said language, and selecting a representative symbol for the transcription alphabet".

At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the "dictionaries for the appropriate language" could contain additional terminological and transcription information about the language, as well as full phonological/phonetic alphabets for that language. This would allow the system to keep all information pertinent to recognition of a specific language in a logically separate data unit, such as dictionary.

Regarding **claim 3**, Bordeaux does not disclose "maximal set (that) comprises any of, or a combination of: phonemes, allophones, rules governing the selection of allophones, a set of examples, and transliteration symbols".

Shu teaches a method of building a rejection grammar, which originally starts with a maximum (full) set of phonemes of a given language and then gradually shrinks the set until sufficient accuracy is achieved using the smallest number of phoneme models. (fig 5, col. 8, lines 6-10)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by Bordeaux to train the neural network to initially contain a full set of phoneme models, as taught by Shu. This would allow the system to learn all the necessary phonemes for language recognition, even at the cost of some unnecessary phoneme duplication. These duplicate phonemes are removed in the "reduction" step that follows the creation of maximal set.

Regarding **claim 4**, Bordeaux discloses the training of the neutral network using examples for each of the desired phones for a specific language (col. 10, lines 20-23).

Bordeaux does not disclose "a said step of reducing said maximal set further comprises reducing an automatic speech recognition phonetic set."

Shu teaches a method of building a rejection grammar, which originally starts with a full set of phonemes of a given language and then gradually shrinks the set until sufficient accuracy is achieved using the smallest number of phoneme models. (fig 5, col. 8, lines 6-10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by Bordeaux to follow up the process of training the neural network with a reduction process taught by Shu. This would significantly improve the efficiency of the system because duplicate and unnecessary phoneme entries would be removed from the ASR set of the system, thus improving the speed of operation and reducing memory requirements for the neutral network.

Regarding **claim 12**, Bordeaux discloses Microphone (col. 5, line 66), computer system (col.13, lines 34-36), and a Medium Vision Pro Audio Spectrum card (co1. 13, lines 56-57). The computer system and accompanying software performs speech analysis and voice-to-text translation (Col.13, lines 57-60)

Bordeaux does not disclose using compact set of phonetic alphabets for voice-to-text system including a reduced text-to-speech phonetics set from which one of a phonological unit, a phonetic unit and an identified variation in said language has been removed.

Shu teaches a method of constructing a smaller set of phoneme models (fig 5, col. 8, lines 6- 10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by Bordeaux to follow up the process of training the neural network with a reduction process taught by Shu. This would significantly improve the efficiency of the system because duplicate and unnecessary phoneme entries would be removed the system, thus improving the speed of operation and reducing memory requirements for the neutral network.

Bordeaux in view of Shu discloses a method for transcribing a language acoustically based on well-defined basic phonetics, however lacks including a reduced text-to-speech phonetics set from which one of a phonological unit, a phonetic unit and an identified variation in said language has been removed.

Karaali discloses a method for neural network based orthography-phonetics transformation wherein the text to speech system is reduced in size (column 21, lines 49-60) and that the neural network is trained to associate with phonetic representation (column 21, lines 31-45). Also, figure 16 teach a phonetic set (element 1604), wherein the alignment separator is removed, which results in a reduced string of phones (element 1606 with column 16, lines 24-40), in order to produce the most accurate phonetic representation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bordeaux in view of Shu's method such that includes reduced text-to-speech phonetics set from which one of a phonological unit, a phonetic unit and an identified variation in said language has been removed, so that the

storage requirements would not exceed the feasibility of most applications (column 1, lines 38-40).

Regarding **claim 13**, Bordeaux discloses ASR (voice-to-text translation, fig. 1, input to element 3, output of element 7)

Regarding **claim 14**, Bordeaux discloses an ASR system that is speaker-independent (col. 13, line 63).

Regarding **claim 19**, Bordeaux discloses a Microphone (co1. 5, line 66), computer system (co1. 13, lines 34-36), and Medium Vision Pro Audio Spectrum card (col. 13, lines 56-57). The computer system stores language dictionaries (9, fig. 1) and accompanying software performs speech analysis and voice-to-text translation (col.13, lines 57-60).

Bordeaux does not disclose using compact set of phonetic alphabets for voice-to-text system including a reduced text-to-speech phonetics set from which one of a phonological unit, a phonetic unit and an identified variation in said language has been removed.

Shu teaches a method of constructing a smaller set of phoneme models (fig 5, col. 8, lines 6- 10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by Bordeaux to follow up the process of training the neural network with a reduction process taught by Shu. This would significantly improve the efficiency of the system because duplicate and unnecessary

phoneme entries would be removed from the system, thus improving the speed of operation and reducing memory requirements for the neutral network.

Bordeaux in view of Shu discloses a method for transcribing a language acoustically based on well-defined basic phonetics, however lacks including a reduced text-to-speech phonetics set from which one of a phonological unit, a phonetic unit and an identified variation in said language has been removed.

Karaali discloses a method for neural network based orthography-phonetics transformation wherein the text to speech system is reduced in size (column 21, lines 49-60) and that the neural network is trained to associate with phonetic representation (column 21, lines 31-45). Also, figure 16 teaches a phonetic set (element 1604), wherein the alignment separator is removed, which results in a reduced string of phones (element 1606 with column 16, lines 24-40), in order to produce the most accurate phonetic representation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bordeaux in view of Shu's method such that includes reduced text-to-speech phonetics set from which one of a phonological unit, a phonetic unit and an identified variation in said language has been removed, so that the storage requirements would not exceed the feasibility of most applications (column 1, lines 38-40).

5. **Claim 5** is rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali, as applied to claim 4, and further in view of Selounai ("Recognition of Arabic Phonetic Features Using Neural Networks and Knowledge-Based System: a Comparative Study").

Regarding **claim 5**, Bordeaux discloses a phone identifier (5, fig. 1) that is trained to recognize phonemes and all legitimate speech sounds in a language including such sounds as murmurs, and allophones (col. 8, lines 8-15).

Bordeaux in combination with Shu and Karaali do not disclose that the step of reducing an automatic speech recognition set further comprises the use of diacritics, graphemes, and allophones.

Selounai teaches the use of diacritics and graphemes as part of the Arabic phonetic alphabet (page 408, right column, lines 50-55).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the reduction of language set disclosed by Bordeaux in combination with Shu and Karaali to include diacritics and graphemes because this would allow Bordeaux's system to handle standard Arabic utterances for speech-to-text translation, in order to improve linguistic capabilities of the system.

6. **Claim 15** is rejected 35 U.S.C. 103(a) as being obvious over Bordeaux, as applied to claim 14, in combination with Shu and Karaali, and further in view of Neti et al. (USPN 5,953,701), hereinafter referenced as Neti.

Regarding **claim 15**, Bordeaux in combination with Shu and Karaali do not disclose a system that is speaker dependant on gender or age.

However, Neti et al. teaches gender-dependant speech recognition (Abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify system disclosed by Bordeaux in combination with Shu and Karaali to use gender-dependant speech recognition, as taught by Neti, because it would enable it to perform better in contexts where speech recognition of specific gender was desirable.

7. **Claim 8** is rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali ,as applied lo claim 1, and further in view of Buth et al. (USPN 6,546,369), hereinafter referenced as Buth.

Regarding **claim 8**, Bordeaux in combination with Shu and Karaali do not disclose the use of International Phonetics Alphabet (IPA) for transcribing the language.

Bueth et al. teaches the use of IPA to transcribe the language (col. 1, lines 63-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by Bordeaux in combination with Shu and Karaali to use PA for transcribing. This would enable the system to transcribe using internationally accepted standard, hence making the system portable to a multitude of languages.

8. **Claim 9** is rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali, as applied to claim 1, an further in view of Selounai.

Regarding **claim 9**, Bordeaux discloses that his system supports a multitude of pre-determined languages using a neural network (col.5, lines 20-27).

Bordeaux in combination with Shu and Karaali do not disclose that one of these languages is modem Arabic, classical Arabic or colloquial Arabic.

Selounai teaches the use of neural networks f or automatic recogniition of Arabic language (Abstract).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the neural networks in the system disclosed by Bordeaux in combination with Shu and Karaali could use an approach taught by Selounai. This modification of the system would allow it to support Arabic among other pre-determined languages in order to increase linguistic capability of the system.

9. **Claims 10-11** are rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali, as applied to claim 1, and further in view of Jeppesen (USPN 6,490,557).

Regarding **claim 10**, Bordeaux discloses the use of computer the ASR system (col. 13, lines 30-60).

Bordeaux in combination with Shu and Karaali do not disclose downloading phonetic information over a network.

Jeppesen teaches the use of Internet with a central ASR system (23, fig. 3).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to centralize the ASR system to use Internet as taught by Jeppesen, because it would allow the movement of storage of phonetic information to a server and hence reduce the amount of information stored on the client computer. In addition, it would simplify the update of phoneme information to the ASR computers in the networked environment.

Regarding **claim 11,** Bordeaux in combination with Shu and Karaali do not teach downloading phonetic information over WAN, LAN, Internet and HTTP-based networks.

However, it would have been obvious to a person of ordinary skill in the art that use of Internet inherently embodies the use of WAN, LAN, wireless and other types of networks.

10. **Claims 16 and 18** are rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali, as applied to claim 12, and further in view of Selounai.

Regarding **claim 16**, Bordeaux discloses a phone identifier (5, fig. 1) that is trained to recognize phonemes and all legitimate speech sounds in a language including such sounds as murmurs, and allophones (col. 8, lines 8-15).

Bordeaux in combination with Shu and Karaali do not disclose the use of diacritics and graphemes in the phonetic alphabet.

Selounai teaches the use of diacritics and graphemes as part of the Arabic phonetic alphabet (page 408, right col. lines 50-55).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the language set disclosed by Bordeaux in combination with Shu and Karaali to include diacritics and graphemes because this would allow the system to handle standard Arabic utterances for speech-to-text translation, in order to improve linguistic capabilities of the system.

Regarding **claim 18**, Bordeaux discloses that his system supports a multitude of pre-determined languages using a neural network (col.5, lines 20-27).

Bordeaux in combination with Shu and Karaali do not disclose that one of these languages is modern Arabic, classical Arabic or colloquial Arabic.

Selounai teaches the use of neural networks for automatic recognition of Arabic language (abstract).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the neural networks in the system disclosed by Bordeaux in combination with Shu and Karaali could use an approach taught by Selounai. This modification of the system would allow it to support Arabic among other pre-determined languages.

11. **Claim 17** is rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali, as applied to claim 12, and further in view of Buth.

Regarding **claim 17**, Bordeaux in combination with Shu and Karaali do not disclose the use of International Phonetics Alphabet (1PA) for transcribing the language.

Bueth et al. teaches the use of IPA to transcribe the language (col. 1, lines 63-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the ASR system disclosed by Bordeaux in combination with Shu and Karaali to use PA for transcribing. This would enable the system to transcribe using internationally accepted standard, hence making the system portable to a multitude of languages.

12. **Claim 20** is rejected under 35 U.S.C. 103(a) as being obvious over Bordeaux in combination with Shu and Karaali, as applied to claim 19, and further in view of Selounai.

Regarding **claim 20**, Bordeaux discloses a phone identifier (5, fig. 1) that is trained to recognize phonemes and all legitimate speech sounds in a language including such sounds as murmurs, and allophones. (col. 8, lines 8-15)

Bordeaux in combination with Shu and Karaali do not disclose the use of diacritics and graphemes in the phonetic alphabet.

Selounai teaches the use. of diacritics and graphemes as part of the Arabic phonetic alphabet (page 408, right col., lines 50-55)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the language set disclosed by Bordeaux in combination with Shu and Karaali to include diacritics and graphemes because this would allow the system to handle standard Arabic utterances for speech-to-text translation in order to improve linguistic capabilities of the system.

Allowable Subject Matter

13. **Claim 7** is objected to as being dependent upon a rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach nor fairly suggest the combination of elements including reduction of text-to-speech phonetics set using allophones and adding symbols representing the phoneme to be geminated.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jakieda R Jackson whose telephone number is 571.272.7619. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571.272.7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRJ
July 29, 2005

SUSAN MCFADDEN
PRIMARY EXAMINER